Amendments to the Claims:

1-10. (Cancelled)

- 11. (Currently amended) An isolated biologically active beta-secretase polypeptide selected from the group consisting of:
 - a) the polypeptide of SEQ ID NO: 4;
- b) a polypeptide having one to fifty conservative amino acid changes as compared with the polypeptide of SEQ ID NO: 4, wherein said polypeptide includes comprises the transmembrane domain; and
 - c) the polypeptide encoded by the DNA vector insert of ATCC Deposit No. 207159.
- 12. (Currently amended) An isolated biologically active beta-secretase polypeptide encoded by a nucleic acid molecule selected from the group consisting of:
 - a) a nucleic acid molecule the polynucleotide sequence as set forth in SEQ ID NO:1;
 - b) a nucleic acid molecule polynucleotide encoding the polypeptide of SEQ ID NO: 4;
- c) a nucleic acid molecule the polynucleotide of the DNA vector insert in ATCC deposit No. 207159; and
- d) a nucleic acid molecule polynucleotide encoding one to fifty conservative amino acid substitutions as compared with the polypeptide of SEQ ID NO:4, wherein said polypeptide includes comprises the transmembrane domain.
- 13. (Original) An isolated polypeptide having the amino acid sequence of SEQ ID NO: 4.
- 14. (Currently amended) An isolated biologically active polypeptide selected from the group consisting of: amino acids 45-501; amino acids 46-501; and amino acids 62-501.

15-21. (Cancelled)

22. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide is the polypeptide of SEQ ID NO: 4.

- 23. (Currently amended) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide has one to fifty conservative amino acid changes as compared with the polypeptide of SEQ ID NO: 4, wherein said polypeptide includes comprises the transmembrane domain.
- 24. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide is encoded by the DNA vector insert of ATCC Deposit No. 207159.
- 25. (Currently amended) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule the polynucleotide sequence as set forth in SEQ ID NO:1.
- 26. (Currently amended) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule polynucleotide encoding the polypeptide of SEQ ID NO: 4.
- 27. (Currently amended) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule the polynucleotide of the DNA vector insert in ATCC deposit No. 207159.
- 28. (Currently amended) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule polynucleotide encoding one to fifty conservative amino acid substitutions as compared with the polypeptide of SEQ ID NO:4, wherein said polypeptide includes comprises the transmembrane domain.